

Claims

10067597-121001
5 1. A process for manufacturing polymer granules including the successive operations of mixing a base polymer and additives, shaping and grinding the cured polymer mixture to form granules, characterized in that it includes a specific step of adding a shading colorant to the mixture of the base polymer and of the additives, followed by a step of carrying out an incomplete homogenization of said shading
10 colorant in said mixture, the duration of which is fixed according to desired colouring anisotropy characteristics of the granules.

15 2. The process according to claim 1, characterized in that the shading colorant is added during the operation of mixing the base polymer and the additives, the operation of mixing the whole being continued for the time required for the polymer-additives mixture to be homogeneous and corresponding to the desired heterogeneity of the distribution of the shading colorant in the mixture.

20 3. The process according to claim 2, characterized in that the shading colorant is incorporated in an internal mixer brought to a temperature ranging from approximately 100°C to approximately 150°C.

25 4. The process according to claim 1, characterised in that the shading colorant is added subsequently to the operation of mixing the base polymer and the additives.

5. The process according to claim 1, characterized in that the different operations are carried out on a continuous production line.

30 6. The process according to claim 5, characterized in that the shading colorant is added at the time of the extrusion operation, the extruder carrying out incomplete homogenization of the shading colorant.

35 7. The process according to claim 1, characterized in that the different steps are carried out batchwise.

8. The process according to claim 7, characterized in

that the shading colorant is added at the rolls of the mixer or at the calendering machine.

5 9. The process according to claim 1, characterized in that the base polymer is selected from polymers or their derivatives of the rubber, styrene-butadiene rubber (SBR), ethylene-propylenediene monomere (EPDM), elastomer or thermoplastic synthetic high polymer types.

10 10. The process according to claim 1, characterized in that the additives added to the base polymer include one or more colorants.

11. Polymer granules usable for the manufacturing of surface coatings or of moulded articles, characterized in that they present anisotropic shades of colouring.

15 12. A surface coating obtained by implementing granules according to claim 11.

13. Moulded articles obtained by implementing granules according to claim 11.

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